pupal stage, or both. Thus, not only do substantially more insects in the outbreak area survive instars IV to VI and the pupal stage, but more of the survivors are females.

Literature Cited

CAMPBELL, R. W. 1963. Can. Entomol., **95**: 465–474.
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BOOK REVIEW

Man against Tsetse: Struggle for Africa. John J. McKelvey, Jr. Cornell University Press, Ithaca and London. 1973. 306 pp. $12.50.

Entomologists will be fascinated by the author's analysis of the development of knowledge on sleeping sickness and nagana disease of cattle, and how the large continent of Africa was influenced by contributions of medical entomologists. But this book is not merely an account of historical and scientific events and discoveries; it analyses in depth the complicated interrelations that the author, who has spent many years in Africa, has known from his own experience. The book is written by a scientist, who, as readers will find, is also an extremely accomplished writer and master of the language. The book thus provides many enjoyable hours. I am certain that my colleagues who read it will find perusal of this volume to be both informative and pleasurable. It gives much useful data to entomologists, epidemiologists, physicians and microbiologists. The author, a Director for Agriculture of the Rockefeller Foundation, is a knowledgeable medical entomologist (Ph.D., Cornell U.), a scholar, and an expert on Africa.

This book should be read by anyone who plans a trip to Africa—be it for scientific reasons, business, or for pleasure. No special training in entomology is required and the book will be enjoyed by entomologists as well as by laymen who want an authoritative, up-to-date view of the field. The author has succeeded admirably in bringing together for the first time the information on the tsetse fly, the trypanosomes, and the development of African nations. It will therefore serve both as a thorough review of the history and present status of the problem for college students, and as a guide to the literature for serious researchers. The Chapter Notes (pp. 239–292) are very valuable for the latter. An index of 13 pages completes the volume.

There was a definite need for a book on sleeping sickness and at last we have one, written by an extremely competent authority. It ought to be in every public and highschool library so as to become for young men and women interested in Africa's future and medical entomology what Paul DeKruif's "Microbe Hunters" became for future microbiologists—the stimulus to devote one's life to a deserving cause. I found "Man against Tsetse" as stimulating as DeKruif's book, and at the same time more accurate and up-to-date. Years of careful research have been spent by the author in searching and checking all the data and facts.

The tsetse fly had an enormous impact on Africa's development. Great strides have been made in controlling the insects and in chemotherapy of the disease. Nevertheless, there remains the dangerous potential for an epidemic, as demonstrated in recent, new outbreaks of sleeping sickness. This is pointed out succinctly by McKelvey. The book will remain invaluable for a long time to come to those engaged in biological, medical and agricultural research.

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